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ABSTRACT

In 1988, a study was conducted at Miami-Dade Community College to explain declining scores on the College Level Academic Skills Test (CLAST) since 1984. Specifically, the study sought to determine whether students had changed in terms of their basic skills at college entry, native language, needs for English as a Second Language instruction, cumulative credits, grade point average (GPA), and number of completed English courses. Students who took the CLAST for the first time in March 1984, 1985, 1986, or 1987 were included in the study. Study findings included the following: (1) in 1985, 88% of the students who took all three English courses passed all four parts of the CLAST, while in 1987, only 74% passed all four parts; (2) 97% of the 1985 group who took all three English courses passed the reading subtest, compared to 84% of the 1987 group; (3) students taking the CLAST in 1987 had placement test scores and GPA's that were similar to students from previous years; (4) the number of native English speakers taking the CLAST increased from 51% in 1984 to 57% in 1987, eliminating English language skills as a factor in declining scores; and (5) the percentage of students who passed all three required English courses with a "C" or better increased from 54% in 1985 to 80% in 1987, eliminating the possibility that CLAST takers are not satisfactorily completing English requirements. (AAC)

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WHY IS CLAST PERFORMANCE DECLINING?

Research Report No. 88-07

February 1988

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WHY IS CLAST PERFORMANCE DECLINING?

Currently, a statewide debate is raging over implementation of the proposed 1989 College Level Academic Skills Test (CLAST) standards. One argument that proponents for the 1989 standards give is that student performance will rise to meet the increased 1989 standards. Statewide data indicate, however, that performance has not significantly improved since the Fall of 1984 in most areas and has declined due to the implementation of the 1986 standards.

This downward trend also has been true of MDCC students' performance on CLAST. Beginning with the Spring, 1987, administration, however, a new and more alarming trend was evident in the MDCC data. Student performance for that administration showed a steady decline that went beyond implementation of the increased standards. Using 1984 standards, over a two-year period the percentage of students passing all four subtests dropped from 84% to 76%. As shown below, only computation results remained stable.

Percentage Meeting 1984 Standards

	Reading	Writing	Computation	Essay
Spring 1985	97.8	94.1	97.8	88.0
Spring 1986	97.7	93.8	97.1	86.5
Spring 1987	89.4	91.6	97.6	83.8

Similar, though less extreme, results were found again for the next administration.

Why did CLAST scores decline for two straight administrations? One possibility was that a different type of student was taking the test, perhaps one who entered the College less well-prepared. Another possibility was that the curriculum that the students were experiencing, especially in English, had changed in some fashion. A third possibility, of course, was that the CLAST itself had changed so that it was a test that was more difficult than students had taken previously so that students needed to perform better to receive the same score. Since the third possibility -- that the test itself had changed -- could not be directly addressed with the

information available, a study was undertaken which would primarily address the questions of whether the type of student being tested had changed and secondarily, whether results seemed to indicate that the English curriculum might have changed. This study, therefore, sought answers to the following questions:

1. Over time, have the characteristics of students taking the CLAST changed in terms of:
 - a) entering level of basic skills,
 - b) native language,
 - c) percent requiring English-as-a-Second-Language (ESL) coursework,
 - d) cumulative credits and grade point average (GPA),
 - e) number of English courses taken?
2. Do students who take all three English courses have the same percentage who pass the CLAST regardless of the year in which they took it?
3. Who are the students who have not taken all three English courses? What differentiates those who passed and those who failed the CLAST without three English courses from Miami-Dade?

Procedures

Students who took the CLAST for the first time in March of 1984, 1985, 1986, or 1987 were selected for inclusion in this study. Their entering level of basic skills was assessed using either the CGP or MAPS tests. Inclusion of both of these tests was necessary because students who entered Miami-Dade prior to January of 1985 took the CGP, while more recent students took the MAPS. Students were counted as requiring college preparatory work if they had 1) entering reading test scores of less than 19 on the CGP or 12 on the MAPS, 2) entering writing test scores of less than 17 on the CGP or 30 on the MAPS, and 3) computation scores of less than 21 on the CGP or 206 on the algebra portion of the MAPS. Cumulative grade point average and number of credits earned were calculated based on all courses taken at the College. The number of English courses taken was calculated based on completion of ENC 1101, 1102, and 2301 with a grade of "C" or better. The

English courses also had to be taken earlier than or in the same term that the CLAST was administered.

To assess differences in curricular patterns for students who either failed or passed the CLAST with less than all three English courses, a random sample of 51 persons from 119 persons who fit this category and passed was selected, and another group of 51 persons from 77 persons who failed and also fit this category was selected.

Results

Students taking the CLAST in the Spring of 1987 had CGP Reading and Writing scores which were about one point lower than two years ago. CGP computation scores had not changed in the time period. Current students also had cumulative GPA's which were similar to those of previous test takers. The number of credits accumulated was lower than one year ago but higher than two and three years ago. For full results see Table 1.

You will note in studying the number tested on the CGP and the MAPS in Table 1 that the number of CGP test takers has been declining while a significant number of MAPS test takers showed up for the first time in the Spring 1987 group. Since differences in the CGP Reading and Writing scores might be due more to switching to the MAPS test than to any particular decline in the group as a whole, basic skills test scores were also analyzed by the percentage passing either the CGP or the MAPS. Results found in Table 2 confirm that students taking the CLAST have not changed in terms of entering levels of basic skills.

Previous research had indicated that students who had needed to enroll in English-as-a-Second-Language course or who had a native language other than English had scored lower on the communication portions of the CLAST. As shown by Table 3, the percentage of test takers who had ESL credits has not shown statistically significant changes over time. A slightly different result was found for native language (see Table 4). While 57% of the Spring 1987 test takers had indicated that their native language was English, only 51% of the 1984 test takers had indicated English

as their native language. Therefore, English language skills do not appear to be an important reason for declining CLAST scores.

A final possibility addressed by this study was that perhaps fewer students are satisfactorily completing their English requirements as currently mandated by the College. As shown by Table 5, this is clearly not the case. From the time that the third English course, ENC 2301, was required in the Summer of 1984, the percentage of students who have completed all three English courses with a "C" or better has risen from 54% two years ago to 80% for the Spring 1987 administration. See Table 5 for full results.

If more students are taking and passing all three required English courses, then why did performance on the CLAST drop? Clearly, as shown by Table 6, there is a difference in the percentage of students completing English who also pass CLAST. In 1985, 88% of the students who took all three English courses passed all four parts of the CLAST. In 1987, only 74% passed all four parts. As shown by Table 7, the drop in Reading appears particularly acute. In Reading, 97% of the Spring 1985 group who took all English courses passed compared to 84% of the Spring 1987 test takers. The next largest drop occurred on the Essay subtest; 94% of the Spring 1985 test takers passed compared to 88% of the 1987 test takers.

The remaining question is who are the students who did not complete all three English courses? Are there differences between this group based on whether they failed or passed the CLAST? As shown by the results of the transcript analysis in Table 8, there are some very definite differences between CLAST "failers" and "passers". About 20% of the sample had transferred in English credits from other institutions and/or received CLEP credit for one or more English courses. Students who passed the CLAST were much more likely to have done this than those who failed. Of the three courses, the sample of CLAST passers had been most likely to have taken only ENC 2301. Those who had failed the CLAST were most likely to have only taken ENC 1101 and ENC 1102 and to have skipped 2301. Fewer than 10% of each group had taken none of these courses at Miami-Dade. In a few cases, students had taken all three courses but had not satisfactorily completed

them or completed them at a later date. The withdrawal patterns also differed for the two groups. While two-thirds of the CLAST passers had not withdrawn from any English course, this was true for fewer than half of those that failed. Both groups had taken other MDCC English courses. In the majority of cases, the numbering system indicated that the students took these courses long enough ago that they were not operating under the current numbering. Not surprisingly, more of the failers had enrolled in college preparatory courses than the passers.

Discussion

It would be nice to have some clear-cut conclusions to present at this point. Unfortunately, that is not the case. It can be concluded that on the characteristics that we have generally associated with differences in CLAST performance -- level of entering basic skills, English as a native language number of credits, and grade point average -- the current group of students is not much different from previous groups. If anything, the Spring 1985 group appears to have been uncharacteristically high on these demographics. Nor are fewer students completing their required English sequence; in fact, the reverse is true. The most startling conclusion of this study was that over time the percentage of students who have completed all three English courses who passed CLAST has declined. This finding raises the possibility that some curriculum shifts have occurred, but a number of other explanations are also possible.

Perhaps this drop might be due, at least in part, to greater vigilance in ensuring the more poorly prepared student enrolls in all the English courses. Previous studies (e.g. R.R. 85-03) have shown that the students who could benefit most by a third English course are the ones that are mostly likely to try to avoid taking it. In 1987, only 20% of all test takers did not satisfactorily complete all three English courses. Perhaps a "C" or better in three English courses does not ensure adequate CLAST performance for students who enter with low basic skills and barely meet passing criteria in each course.

Finally, the possibility was raised in the introduction that the scaling of the test itself had shifted so that current students needed to perform better to get the same score. The only way to be able to consider this alternative would be if everything else remained the same at the institution. It is impossible to make such a statement.

Two administrations occurred with a decline in Reading, Writing, and the essay. The latest results for the Fall administration indicate another decline on the essay but stable or improved results in the other two areas. Clearly, a problem exists. Clearly, the answers to what is happening to CLAST scores seem to lie outside the realm of a quick computer analysis. Ideas on what are the possible causes as well as suggestions for research studies, perhaps in the classroom, are welcomed.

Table 1
Means and Standard Deviations of Variables in
Study by CLAST Administration

Variable/Year	Number	Mean	S.D.	p<.05 for difference Between at Least Two Groups
<u>CGP Reading</u>				
				F=3.75
Spring 1984	800	21.57	7.43	
Spring 1985	569	22.05	7.29	
Spring 1986	743	21.69	7.37	
Spring 1987	600	20.68	7.36	
<u>CGP Writing</u>				
				F=3.60
Spring 1984	801	25.24	6.12	
Spring 1985	572	25.16	6.16	
Spring 1986	743	24.80	6.04	
Spring 1987	600	24.24	6.12	
<u>CGP Computation</u>				
				(n.s.)
Spring 1984	796	24.04	6.52	
Spring 1985	571	24.02	6.52	
Spring 1986	748	24.14	6.37	
Spring 1987	604	23.35	6.08	
<u>MAPS Reading</u>				
				-
Spring 1984	0	-	-	
Spring 1985	2	13.5	4.94	
Spring 1986	30	15.47	5.10	
Spring 1987	175	17.08	4.73	
<u>MAPS Writing</u>				
				-
Spring 1984	0	-	-	
Spring 1985	2	24.5	6.36	
Spring 1986	30	37.1	10.29	
Spring 1987	175	41.75	9.63	
<u>MAPS Algebra</u>				
				-
Spring 1984	0	-	-	
Spring 1985	11	17.0	6.98	
Spring 1986	34	15.74	5.84	
Spring 1987	180	13.48	6.27	
<u>Cumulative GPA</u>				
				(n.s.)
Spring 1984	1,097	2.86	0.53	
Spring 1985	727	2.91	0.51	
Spring 1986	974	2.89	0.	
Spring 1987	962	2.86	0.55	
<u>Cumulative Credits</u>				
				F=123.19
Spring 1984	1,097	61.77	13.78	
Spring 1985	727	65.93	16.34	
Spring 1986	974	75.69	17.49	
Spring 1987	962	68.88	19.29	

Table 2
Percent Passing Basic Skills Tests
(Either CGF or MAPS) by CLAST Administration

CLAST Administration	Number in Group	Number Passing	Percent Passing
Reading			
Spring 1984	792	519	65.53
Spring 1985	568	384	67.61
Spring 1986	764	493	64.53
Spring 1987	759	509	67.06
$X^2=1.8$, n.s.			
Writing			
Spring 1984	792	723	91.29
Spring 1985	568	510	89.79
Spring 1986	691	691	90.45
Spring 1987	666	666	87.75
$X^2=5.8$, n.s.			
Computation			
Spring 1984	792	556	70.20
Spring 1985	568	401	70.60
Spring 1986	764	544	71.20
Spring 1987	759	554	72.99
$X^2=1.6$, n.s.			
Pass All Three			
Spring 1984	792	399	50.38
Spring 1985	568	296	52.11
Spring 1986	764	391	51.18
Spring 1987	759	399	52.57
$X^2=7.1$, n.s.			

Table 3

Percentage of Students with ESL Credits
by CLAST Administration

ESL Credits	CLAST Administration							
	Spring 1984		Spring 1985		Spring 1986		Spring 1987	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No	1,010	92.07	676	92.98	899	92.30	893	92.83
Yes	87	7.93	51	7.02	75	7.70	69	7.17
Total	1,097	100.00	727	100.00	974	100.00	962	100.00

$\chi^2=0.7$, n.s

Table 4

Native Language by CLAST Administration

CLAST Administration	Native Language					
	English		Not English		Total	
	Number	Percent	Number	Percent	Number	Percent
Spring 1984	558	50.87	539	49.13	1,097	100.00
Spring 1985	339	54.88	328	45.12	667	100.00
Spring 1986	520	53.39	454	46.61	974	100.00
Spring 1987	549	57.07	413	42.93	962	100.00

$\chi^2=8.3$, $p<.05$

Table 5

Number of Students Taking All Three*
English Courses

CLAST Administration	Number in Group	Number Taking All Three	Percent Taking All Three
Spring 1984	1,097	7	0.64
Spring 1985	727	394	54.20
Spring 1986	974	700	71.87
Spring 1987	962	771	80.15

*Based on passing ENC 1101, ENC 1102, ENC 2301 with a "C" or better.

Table 6

Number of Students Passing All Four CLAST Subtests
by Number of English Courses* Taken

CLAST Administration	Number of English Courses Taken											
	0			1			2			3		
	Number	Number Pass 4	Percent Pass 4	Number	Number Pass 4	Percent Pass 4	Number	Number Pass 4	Percent Pass 4	Number	Number Pass 4	Percent Pass 4
Spring 1985	38	16	42.11	101	63	62.38	194	115	59.28	394	348	88.32
Spring 1986	19	12	63.16	98	58	10.06	157	95	60.51	700	539	77.00
Spring 1987	15	10	66.67	67	43	64.18	109	67	61.47	771	574	74.45

*Based on passing ENC 1101, ENC 1102, ENC 2301 with a "C" or better.

Table 7

Number of Students Passing Communication Subtests by
Number of English Courses* Taken

CLAST Administration	Number of English Courses Taken											
	0			1			2			3		
	Number	Number Pass	Percent Pass	Number	Number Pass	Percent Pass	Number	Number Pass	Percent Pass	Number	Number Pass	Percent Pass
Pass Reading												
Spring 1985	38	27	71.05	101	79	78.22	194	153	78.87	394	381	96.70
Spring 1986	19	18	94.74	98	81	82.65	157	128	81.53	700	624	89.14
Spring 1987	15	10	66.67	67	49	73.13	109	88	80.73	771	645	83.66
Pass Writing												
Spring 1985	38	30	78.95	101	90	89.11	194	160	82.47	394	384	97.46
Spring 1986	19	17	89.47	98	83	84.69	157	133	84.71	700	649	92.71
Spring 1987	15	13	86.67	67	59	88.06	109	98	89.91	771	725	94.03
Pass Essay												
Spring 1985	38	25	65.79	101	80	79.21	194	147	75.77	394	369	93.65
Spring 1986	19	14	73.68	98	81	82.65	157	134	85.35	700	629	89.86
Spring 1987	15	11	73.33	67	55	82.09	109	78	71.56	771	682	88.46

*Based on passing ENC 1101, ENC 1102, ENC 2301 with a "C" or better.

Table 8

Transcript Analysis of a Sample Who Did Not Complete
All Three English Courses, Spring 1987 Test Takers

	Failed CLAST		Passed CLAST	
	Number	Percent	Number	Percent
Transferred in English Credits				
Yes	5	9.80	15	29.41
No	46	91.20	36	70.59
Received CLEP Credits				
Yes	5	9.80	14	27.45
No	46	91.20	37	72.55
Courses Taken				
ENC 1101 Only	4	7.84	1	1.96
ENC 1102 Only	3	5.88	4	7.84
ENC 2301 Only	12	23.54	22	43.14
ENC 1101 & ENC 1102	18	35.29	7	13.73
ENC 1102 & ENC 2301	7	13.73	6	11.76
ENC 1101 & ENC 2301	2	3.92	6	11.76
None of These	4	7.84	3	5.88
All Three	1	1.96	2	3.92
Number of Withdrawals From English Courses				
0	22	43.14	33	64.71
1	15	29.41	9	17.65
2	9	17.65	5	9.80
3	2	3.92	2	3.92
4	3	5.88	2	3.92
Other M-DCC English Courses Taken				
ENC 1100	14	27.45	1	1.96
ENC 1103	21	41.18	18	35.29
ENC 1136	11	21.57	14	27.45
ENC 0007	12	23.53	-	-
ENC 1034	6	11.76	1	1.96
ENC 0001	4	7.84	-	-
ENC 2906	2	3.92	-	-
ENC 9992	2	3.92	-	-
ENC 1 92	4	7.84	-	-
ENG 1001	1	1.96	-	-
ENC 1132	1	1.96	-	-
LIN 2342	1	1.96	-	-
ENC 9000	1	1.96	-	-
ENC 9001	1	1.96	-	-
ENL 2023	-	-	1	1.96
ENC 1131	-	-	2	3.92
ENC 1242	-	-	1	1.96

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